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Appl. No. 10/064,712
Amdt. dated June 22, 2006
Reply to Office action of May 17, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1-5 (cancelled).

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6 (previously presented): A signal compensation circuit comprising:

a detection circuit for detecting a signal level of a transmission signal transmitted via a transmission line; and

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a correction circuit for dynamically compensating the transmission signal according to a comparison result generated by comparing the transmission signal with a reference level, the correction circuit comprising:

a first resistor; and

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a plurality of unit current sources selectively turned on or off according to a difference between the transmission signal and the reference level, the plurality of unit current sources generating a compensation current according to a result generated from the detection circuit, wherein the compensation current passes through the first resistor to generate a compensation voltage for compensating the signal level of the transmission signal.

20 7 (cancelled).

8 (previously presented): The signal compensation circuit of claim 6 wherein the correction circuit further comprises a second resistor connecting between the first resistor and the transmission line.

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9 (original): The signal compensation circuit of claim 6 wherein the transmission signal is transmitted via the transmission line.

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- 10 (original): The signal compensation circuit of claim 9 wherein the transmission line is an Ethernet transmission line.
- 5 11 (original): The signal compensation circuit of claim 6 wherein the transmission signal is an MLT-3 coded signal.
- 12 (original): The signal compensation circuit of claim 6 wherein the transmission signal is a 100Base-T signal.
- 10 13 (original): The signal compensation circuit of claim 6 wherein the detection circuit detects a difference between the transmission signal and the reference level at intervals of a predetermined period.
- 15 14 (original): The signal compensation circuit of claim 6 wherein the transmission signal is a differential signal.
- 15-17 (cancelled).
- 20 18 (original): The signal compensation circuit of claim 14 further comprising a common-mode power supply for providing the differential signal with a common-mode voltage.
- 19 (original): The signal compensation circuit of claim 14 wherein the signal
- 25 compensation circuit compensates a baseline wander of the transmission signal.
- 20 (original): The signal compensation circuit of claim 18 wherein the common-mode voltage is 1.8 volts.

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21 (cancelled).